

REMARKS

Claims 1-21, 36-57 and 59-60 were previously canceled. Claims 22-35, 58 and 61-63 remain pending in this application. Applicant reserves the right to pursue the original claims and other claims in this and other applications.

At the outset, Applicant wishes to acknowledge with appreciation that claims 22-35, 58 and 61 have been allowed. Similarly, Applicant acknowledges with appreciation that claim 62 would be allowable if rewritten in independent form, including all of the limitations of the base claim and any intervening claims.

Claim 63 stands rejected under 35 U.S.C. § 103(a) as being unpatentable over Arunachalam et al., U.S. Patent No. 6,139,696 ("Arunachalam") in view of Numata, U.S. Patent No. 5,476,817 ("Numata"). The rejection is respectfully traversed.

Applicant respectfully submits that the cited combination does not disclose, teach or suggest the claimed invention. Specifically, neither Arunachalam nor Numata teach or suggest "forming a second contact opening in said second insulating layer to expose said conductive plug; forming a barrier layer in said contact opening and in contact with said conductive plug." Further, the Office Action does not argue that the references teach this limitation or that this limitation would be obvious in view of the references. Arunachalam discloses an opening 917 that is in contact with interconnect 908, which overlays the conductive plug 907. (FIG. 11; Col. 6, lines 40-41). Thus, Arunachalam does not disclose an opening "to expose said conductive plug," as recited by claim 63. Further, the barrier layer 1002/1102 in Arunachalam is not "in contact with said conductive plug." Instead, the barrier layer 1002/1102 is in contact with interconnect 908, which overlays the conductive plug 907. (FIG. 11; Col. 6, lines 40-41). Numata fails to remedy the deficiency of Arunachalam. Numata is relied on by the Office Action to teach that an aluminum nitride layer is formed over metal conductive

contacts. (Office Action at 2). Thus, the Arunachalam and Numata combination fails to teach or suggest all of the limitations of claim 63.


Claim 62 depends from claim 63 and should be allowable along with claim 63 for at least the reasons provided above. Accordingly, withdrawal of the rejection and allowance of claims 62 and 63 is respectfully requested.

Claim 62 is objected to for being dependent upon a rejected base claim, but would be allowable if rewritten in independent form. Claim 62 depends from claim 63 and incorporates all limitations of the claim. As discussed above, Applicant respectfully submits that none of the references teach or suggest all limitations of claim 63. Accordingly, Applicant believes that claims 62 and 63 are in condition for allowance.

In view of the above amendment, Applicant believes the pending application is in condition for allowance.

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Respectfully submitted,

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